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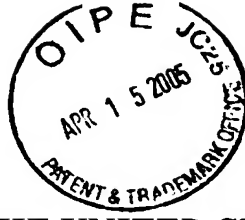
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<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	<b>Application Number</b>	10/792,280	
	<b>Filing Date</b>	March 4, 2004	
	<b>First Named Inventor</b>	Michael R. BOWMAN <i>et al.</i>	
	<b>Group Art Unit</b>	1653	
	<b>Examiner Name</b>	Not Yet Assigned	
<b>Total Number of Pages in This Submission</b>	7	<b>Attorney Docket Number</b>	031896-029000 (AM101023)

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Declaration and Power of Attorney <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Application Data Sheet <input checked="" type="checkbox"/> Other Enclosure(s):  <b>PTO Form-1449 w/copies of seventy-six (76) references</b>
<b>Remarks</b>		<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 19-2380 (031896-010000) for the above identified docket number.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	<u>Raymond Van Dyke, Reg. No. 34,746</u> Nixon Peabody LLP 409 9 <sup>th</sup> Street, N.W. Suite 900 Washington, D.C. 20004-2128
Signature	
Date	April 15, 2005

CERTIFICATE OF MAILING	
CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]	
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April 15, 2005 Date	_____ Signature



Docket No. 031896-029000 (AM101023)  
Patent

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

*In re* PATENT application of:

Michael R. BOWMAN *et al.*

Group Art Unit: 1653

Application No.: 10/792,280

Examiner: To be Assigned

Filed: March 04, 2004

Confirmation No.: 3906

For: COMPOSITIONS AND METHODS  
FOR DIAGNOSING AND TREATING  
ASTHMA OR OTHER ALLERGIC  
OR INFLAMMATORY DISEASES

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR § 1.56**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents is enclosed.

The documents are being submitted within three (3) months of the filing of this application or entry into the national stage of this application, or before the first Office Action on the merits, whichever is later, therefore no fee or certification is required under 37 C.F.R. § 1.97(b).


In addition, some of these documents were cited during the prosecution of the corresponding International application. A copy of the International Search Report is attached setting forth the portion of each document considered relevant by the Examiner. An English-language counterpart of the foreign-language document has not been provided. The absence of a translation or an English-language counterpart document does not relieve the PTO from its duty to consider any submitted document (37 C.F.R. § 1.98 and M.P.E.P. § 609).

It is requested that the accompanying PTO-1449 be considered and made of record in the above-identified application. To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initial a copy of this form be returned to the undersigned.

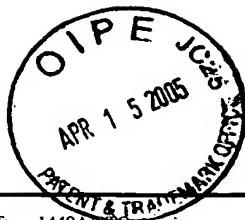
The Commissioner is hereby authorized to charge any fees connected with this filing which may be required now, or credit any overpayment to Deposit Account No. 19-2380.

Respectfully submitted,

Date: April 15, 2005

By:   
Raymond Van Dyke  
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/792,280
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				Art Unit	1653
Examiner Name	Not Yet Assigned				
Attorney Docket Number	031896-029000 (AM101023)				
Sheet	1	Of	4		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		4,935,233	06-19-1990	Bell <i>et al.</i>	
		4,569,789	02-11-1986	Blattler <i>et al.</i>	
		4,751,180	06-14-1988	Cousens <i>et al.</i>	
		4,522,811	06-11-1985	Eppstein <i>et al.</i>	
		4,554,101	11-19-1985	Hopp	
		4,980,281	12-25-1990	Housey	
		5,266,464	11-30-1993	Housey	
		5,877,007	03-02-1999	Housey	
		4,638,045	01-20-1987	Kohn <i>et al.</i>	
		5,866,123	02-02-1999	MacLeod	
		5,459,039	10-17-1995	Modrich <i>et al.</i>	
		5,688,635	11-18-1997	Parker <i>et al.</i>	
		4,671,958	06-09-1987	Rodwell <i>et al.</i>	
		4,625,014	11-25-1986	Senter <i>et al.</i>	
		4,489,710	12-25-1984	Spitler	
		5,919,619	07-06-1999	Tullis	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Kind Code <sup>3</sup> Country Code <sup>4</sup> Number <sup>5</sup> (if kno				
		WO01/92513	12-06-2001	Arndt <i>et al.</i>		
		WO01/68836	09-20-2001	Beach <i>et al.</i>		
		WO01/70949	09-27-2001	Graham <i>et al.</i>		
		WO00/44895	08-03-2000	Kreutzer <i>et al.</i>		
		WO00/44766	08-03-2000	MacLeod		
		WO01/29058	04-26-2001	Mello <i>et al.</i>		
		WO04/073623	09-02-2004	Morris		
		WO03/078578	09-25-2003	Ochoa <i>et al.</i>		
		WO00/63364	10-26-2000	Pachuk <i>et al.</i>		
		WO03/073990	09-12-2003	Rothenberg		
		WO01/75164	10-11-2001	Tuschl		
		WO99/14346	03-25-1999	Woolfe		
		WO01/36646	06-25-2001	Zernicka-Goetz <i>et al.</i>		

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/792,280
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				First Named Inventor	Michael R. BOWMAN <i>et al.</i>
				Art Unit	1653
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	031896-029000 (AM101023)
Sheet	2	Of	4		
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Exam iner Initial s	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
		AKIMOTO <i>et al.</i> , <i>J. Exp. Med.</i> , 187:1537-1542, 1998			
		DELAGRAVE <i>et al.</i> , <i>Protein Engineering</i> , 6:327-331, 1993			
		ELIAS <i>et al.</i> , <i>J. Clin. Invest.</i> , 104:1001-1006, 1999			
		FINLEY <i>et al.</i> , <i>Proc. Natl. Acad. Sci. USA</i> , 92:9378-9382, 1995			
		GAVETT <i>et al.</i> , <i>Am. J. Respir. Cell Mol. Biol.</i> , 10:587-593, 1994			
		GOSSEN <i>et al.</i> , <i>Science</i> , 268:1766-1769, 1995			
		GRUNIG <i>et al.</i> , <i>Science</i> , 282:2261-2263, 1998			
		HAMMERMANN <i>et al.</i> , <i>Amino Acids</i> , 21:211-219, 2001			
		HOSHIDE <i>et al.</i> , <i>Genomics</i> , 38:174-178, 1996			
		KEEN <i>et al.</i> , <i>Trends Genet.</i> , 7(1):5, 1991			
		KUPERMAN <i>et al.</i> , <i>J. Exp. Med.</i> 187:939-948, 1998			
		LAM, <i>Anticancer Drug Des.</i> , 12:145, 1997			
		LANGE <i>et al.</i> , <i>N. Engl. J. Med.</i> , 339:1194-1200, 1998			
		MANNINO <i>et al.</i> , <i>Mor. Mortal Wkly. Rep. CDC Surveill. Summ.</i> , 47:1-27, 1998			
		MARATEA <i>et al.</i> , <i>Gene</i> 40:39-46, 1985			
		MIYATA <i>et al.</i> , <i>Clin. Exp. Allergy</i> , 29:114-123, 1999			
		MURPHY <i>et al.</i> , <i>Proc. Natl. Acad. Sci. USA</i> , 83:8258-8262, 1986			
		MYERS <i>et al.</i> , <i>Science</i> , 230:1242, 1985			
		NO <i>et al.</i> , <i>Proc. Natl. Acad. Sci., USA</i> , 93:3346-3351, 1996			
		WANG <i>et al.</i> , <i>Nat. Biotech.</i> , 15:239-243, 1997			
		WILLS-KARP <i>et al.</i> , <i>Science</i> , 282:2258-2261, 1998			
		WILLS-KARP, <i>Annu. Rev. Immunol.</i> , 17:255-281, 1999			
Examiner Signature				Date Considered	

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Sheet	3	Of	4	Attorney Docket Number		031896-029000 (AM101023)
<b>OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS</b>						
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T <sup>2</sup>
		BAGGIO <i>et al.</i> , <i>J. Pharmacol. Exp. Ther.</i> , 290:1409-1416, 1999				
		BUGA <i>et al.</i> , <i>Am. J. Physiol.</i> , 271:H1988-1998, 1996				
		BYRNE <i>et al.</i> , <i>Current Protocols in Molecular Biology</i> , John Wiley and Sons, Inc. (New York), 22.2.1-22.2.13, 2000				
		FINK <i>et al.</i> , <i>Nat. Medicine</i> , 4:1329-1333, 1998				
		GEYER <i>et al.</i> <i>Anal. Biochem.</i> , 39:412, 1971				
		GREENBERG, "Arginase" in "The Enzymes 4," by BOYER, P., LARDY, H., and MYRBACK, K. (eds), The Academic Press, New York, p 257, 1960				
		HAMMERMANN R. <i>et al.</i> , "Cationic proteins inhibit L-Arginine uptake in rat alveolar macrophages and tracheal epithelial cells," <i>American J. Respir. Cell Mol. Biol.</i> , 21:155-162, 1999				
		HEY <i>et al.</i> , <i>Br. J. Pharmacol.</i> , 121:395-400, 1997				
		HILL, A.A., <i>et al.</i> , <i>Genome Biol.</i> , 2(12):1-13, 2001				
		KANYO, <i>et al.</i> , <i>Nature</i> , 383:554-55, 1996				
		LEE <i>et al.</i> , <i>Nature Biotechnol.</i> , 20:500-505, 2002				
		LOCKHART <i>et al.</i> , <i>Nat. Biotechnol.</i> , 14:1850-1856, 1996				
		MEURS H. <i>et al.</i> , <i>Brit. J. Pharmacol.</i> , 126:559-562, 1999				
		PETHE <i>et al.</i> , <i>J. Inorg. Biochem.</i> , 88:397-402, 2002				
		ROSENBAUM and REISSNER, <i>Biophys. Chem.</i> , 265:12753, 1987				
		ROSS, <i>et al.</i> , <i>J. Biol. Chem.</i> , 273:6662-6669, 1998				
		SAIKI <i>et al.</i> , <i>Proc. Natl. Acad. Sci. USA</i> , 86:6230, 1989				
		SCHNORR O. <i>et al.</i> , <i>J. Investig. Dermatol.</i> , 120(6):1016-1022, 2003				
		TENU <i>et al.</i> , <i>Nitric Oxide</i> , 3: 427-438, 1999				
		WILLS-KARP, <i>J. Allergy Clin. Immunol.</i> , 107:9-18, 2001				
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		American Lung Association, Trends In Chronic Bronchitis And Emphysema, Morbidity And Mortality, December 2000			
		CARVAJAL <i>et al.</i> , <i>J. Inorg. Biochem.</i> , 77: 163-167, 1999			
		COX <i>et al.</i> , <i>Nat. Struct. Biol.</i> , 6: 1043-1047, 1999			
		HIRSCH-KOLB <i>et al.</i> , <i>Anal. Biochem.</i> , 35: 60, 1970			
		JONES H. <i>et al.</i> , <i>Brit. J. of Pharmacol.</i> , 133:181-1189, 2001.			
		KLASEN, S., <i>et al.</i> , <i>Brit. J. Pharmacol.</i> , 132:1349-1357, 2001			
		MEURS, H., <i>et al.</i> , <i>British J. Pharmacol.</i> , 136:391-398, 2002			
		MEURS, H., <i>et al.</i> , <i>Trends Pharmacol. Sci.</i> , 24(9):450-455, 2003			
		MORRIS, C.R., <i>et al.</i> , <i>Blood</i> , 102(11):764A, 2003			
		NISHIBE <i>et al.</i> , <i>Anal. Biochem.</i> , 43:357, 1971			
		POREMBSKA <i>et al.</i> , <i>Cancer</i> , 94: 2930-2934, 2002			
		SELAMINIA <i>et al.</i> , <i>Biochem. Pharmacol.</i> , 55:1241-1245, 1998			
		SHAHANA S. <i>et al.</i> , <i>Mediators of Inflammation</i> , 11:141-148, 2002			
		SONG, E. <i>et al.</i> , <i>Nature Med.</i> , 9(3):347-351, 2003			
		SUI <i>et al.</i> , <i>Proc. Natl. Acad. Sci. USA</i> , 99:5515-5520, 2002			
		TORMANEN CD, <i>J. Inorg. Biochem.</i> , 93:243-246, 2003			
		URBAN <i>et al.</i> , <i>Immunity</i> , 8(2):255-645, 1998			
		YE <i>et al.</i> , <i>Science</i> , 283:88-91, 1999			
		ZIMMERMANN, N., <i>et al.</i> , <i>J. Clin. Investig.</i> , 111(12):1863-1874, 2003			
		ZUCKERMANN <i>et al.</i> , <i>J. Med. Chem.</i> , 37:2678-85, 1994			
		International Application No. PCT/US2004/006470, International Search Report dated March 4, 2005			
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